

REMARKS

This is intended as a full and complete response to the Office Action dated July 29, 2004, having a shortened statutory period for response set to expire on October 29, 2004. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-38 remain pending in the application and are shown above. Claims 1-23, 26-30, and 32-34 are rejected and claims 24, 25 and 31 stand objected to. Claims 1, 3, 5, 9, 11-13, 16, 17, 26-28, 30-32 and 34 have been amended to further clarify aspects of the invention. New claims 35 – 38 have been added. No new matter has been added. Reconsideration of the rejected claims is respectfully requested for reasons presented below.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 5, 7, 11, 13-14, 16-18, 21, 26, 28, and 33-34 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 4,396,065 to *McKenney*. The Examiner states that *McKenney* discloses a back-off tool for use in a tubular member disposed inside a wellbore that comprises an inherent housing and at least one sonic wave generator mounted within the housing, wherein the wave generator is configured to generate a plurality of sonic waves. The Examiner further states that *McKenney* discloses a method for backing off an upper portion of a tubular member joined to a lower portion of the tubular by a threaded connection in a wellbore.

In response to the above rejection, Applicant has amended independent claims 1, 3, 5, 11, 16 and 26 to further clarify aspects of the invention. Specifically, Applicant has amended these claims to further describe attributes of the generated sonic waves. *McKenney* does not teach, show or suggest the creation of a sonic wave at a selected frequency as recited in independent claims 1, 5, 11, 16 and 26. Therefore, Applicant respectfully requests allowance of these claims and their respective dependent claims.

Claim Rejections Under 35 U.S.C. § 103

Claims 2-4, 6, 12, 20, 27, and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *McKenney* in view of U.S. patent 4,752,917 to *Dechape*. The Examiner states that *Dechape* teaches a pressure wave generator that generates a pressure wave at a predetermined frequency (col. 2, lines 44-58).

Applicant respectfully disagrees. *Dechape* discloses a system utilizing sonic or ultrasonic waves for accurately measuring distance or displacement in spite of the effect of the environment on the speed of sound. *Dechape* further discloses a sonic or ultrasonic distance or displacement measurement system wherein a constant wavelength of the sonic or ultrasonic wave is maintained, irrespective of variations in the environment (col. 2, lines 16-24).

Claims 8-10 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *McKenney* in view of U.S. patent 6,012,521 to *Zunkel, et al.*

All the claims listed above are rejected under 35 U.S.C. § 103; *McKenney* is a cited reference that is relied upon for each of the rejections listed. However, all of the claims depend from currently amended independent claims 1, 3, 5, 11, 16 and 26. Therefore Applicant believes that these claims are allowable for at least the same reasons listed above.

New Claims

Claims 34-38 have been added. Applicant submits that no new matter was added. Furthermore, Applicant believes that the references cited by the Examiner, alone or in combination, do not teach, show, or suggest a sonic wave generator configured to generate sonic waves at a constant frequency, substantially singular frequency and variable frequency as described in new claims 34-38.

Allowable Subject Matter

Claims 24, 25 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant acknowledges the allowable subject matter, but has elected to not rewrite these claims in independent

form at this time. It should be noted that Applicant has amended the independent claims (16 and 26) from which these claims depend.

Conclusion

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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